

COMPLETE SET OF PENDING CLAIMS:

1. (Currently Amended) A processor comprising:

a process chamber;

a door system for opening and closing the process chamber, with the door system comprising:

a mounting plate having an annular center section having a height H, and first and second legs joined on opposite sides of [a] the annular center section having a height H, with at least one of the first and second legs having a height less than H;

an annular actuator on the mounting plate, with the actuator having a diameter substantially equal to the diameter of the center section of the mounting plate; and

a seal plate attached to the actuator and moveable by the actuator to engage the process chamber to close the process chamber, and with the seal plate moveable by the actuator away from the process chamber, to open the process chamber.

2. (Currently Amended) The processor of claim 1 further comprising a cosmetic cover attached to the mounting plate and covering the first and second legs and the center section of the mounting plate, with the cosmetic cover removable for visual inspection of the engagement of the seal plate and the process chamber, and with operation of the processor unaffected by removal of the cover.

3. (Original) The processor of claim 1 further comprising a door position sensor attached to the first leg of the mounting plate.

4. (Original) The processor of claim 1 further comprising a first lift actuator attached to the first leg of the mounting plate and a second lift actuator attached to the second leg of the mounting plate.

5. (Original) The processor of claim 4 wherein the first and second lift actuators each have a piston moveable within a cylinder and magnetically coupled to a piston follower outside of the cylinder, and with the piston follower of the first lift actuator attached to the first leg of the mounting plate, and with the piston follower of the second lift actuator attached to the second leg of the mounting plate.

6. (Cancelled).

7. (Original) The processor of claim 6 where the height of the first leg is less than 80% of the height of the center section.

8. (Original) The processor of claim 7 where the height of the first leg is less than 60% of the height of the center section.

9. (Cancelled).

10. (Cancelled).

11. (Currently Amended) A processor for processing a workpiece, comprising:

a process chamber having an open front end;

a door system for closing off the open front end of the process chamber, during processing, with the door system including:

a door plate assembly having a mounting plate, a chamber closure plate, a chamber closure plate actuator on the mounting plate linked to the closure plate, for engaging and disengaging the closure plate with the open front end of the process chamber, and a cover associated with the door plate assembly and covering

the mounting plate and the closure plate, with the cover also independent from the door plate assembly, so that the cover can be removed from the door assembly, while the door system is operated, to allow visual inspection of alignment of the closure plate into the open front end of the process chamber; and

~~at least one door plate assembly lift actuator attached to the mounting plate.~~

12. (Currently Amended) The processor of claim 11 wherein the mounting plate has an annular center section and a pair of legs attached to [a] the center section and extending rearwardly at an angle from the annular center section towards the process chamber.

13. (Original) The processor of claim 12 where at least one of the legs has a vertical dimension H and the center section has a vertical dimension D, and where H is less than D.

14. (Currently Amended) The processor of claim 11 ~~wherein the further comprising~~ at least one door plate assembly lift actuator ~~comprises~~ having a piston in a cylinder magnetically linked to piston follower outside of the cylinder, and with the mounting plate connected at least indirectly to the piston follower.

15. (Original) The processor of claim 12 further comprising a door plate assembly lift actuator connected to each of the legs of the mounting plate.

16. (Original) The processor of claim 11 further comprising a chamber closure position sensor on the mounting plate and covered by the cover plate.

17. (Original) The processor of claim 11 wherein the cover plate covers the open front end of the process chamber.

18. (Original) The processor of claim 12 wherein the chamber closure plate actuator is annular and the center section of the mounting plate is annular and concentric with the chamber closure plate actuator.

19. (Cancelled).

20. (Currently Amended) A processor for processing a workpiece, comprising:

a process chamber having an open front end;

[a] door means for closing off the open front end of the process chamber, during processing, with the door means including:

a chamber closure plate,

actuator means for engaging and disengaging the chamber closure plate with the open front end of the process chamber,

alignment means for aligning the chamber closure plate with the open front end of the process chamber, ~~and for moving the chamber closure plate away from the open front end of the process chamber, and~~

~~a cover covering the door means, the cover removable without affecting operation of the door means, for engaging and disengaging, and with the means for engaging and disengaging operable with or without the cover in place.~~

21. (Currently Amended) A system for processing a workpiece, comprising:

an interface section and a process section within an enclosure;

a process robot moveable between the interface section and the process section;

at least one workpiece processor in the process section, with the workpiece processor comprising: a process chamber having an open front end;

a door system for closing off the open front end of the process chamber, during processing, with the door system including:

~~a door plate assembly having a mounting plate, a chamber closure plate, a chamber closure plate actuator on the mounting plate linked to the closure plate, for engaging and disengaging the closure plate with the open front end of the process chamber, and a cover attached to the mounting plate and covering the mounting plate and the closure plate; and~~

a mounting plate having an annular center section having a height H, and first and second legs joined on opposite sides of the annular center section, with at least one of the first and second legs having a height less than H;

an annular actuator on the mounting plate , with the actuator having a diameter substantially equal to the diameter of the center section of the mounting plate; and

a seal plate attached to the actuator and moveable by the actuator to engage the process chamber to close the process chamber, and with the seal plate moveable by the actuator away from the process chamber, to open the process chamber; and

at least one door plate assembly lift actuator attached to the mounting plate.

22. (Cancelled).

23. (New) The processor of claim 21 further comprising a cosmetic cover attached to the mounting plate and covering the first and second legs and the center section of the mounting plate, with the cosmetic cover removable for visual inspection

of the engagement of the seal plate and the process chamber, and with operation of the processor unaffected by removal of the cover .

24. (New) The processor of claim 1 wherein the first and second legs extend rearwardly at an angle from the annular center section towards the seal plate.

25. (New) The processor of claim 1 further comprising at least one adjuster for adjusting alignment of the seal plate with the process chamber.

26. (New) A processor comprising:

a substantially cylindrical process chamber;

a rotor rotatably supported in the process chamber, with the rotor having grooves for holding a plurality of wafers;

a mounting plate having an annular center section having a height H, and first and second legs joined on opposite sides of the annular center section and extending rearwardly at an angle from the annular center section towards the process chamber, with at least one of the first and second legs having a height less than H;

an annular actuator on the mounting plate , with the actuator having a diameter substantially equal to the diameter of the center section of the mounting plate;

a seal plate attached to the actuator and moveable by the actuator to engage the process chamber to close the process chamber, and with the seal plate moveable by the actuator away from the process chamber, to open the process chamber;

at least one adjuster for adjusting alignment of the seal plate and the process chamber; and

a cover covering the mounting plate, with the cover removable from the mounting plate during operation of the actuator, to allow visual inspection of alignment

of the seal plate with the process chamber and use of the adjuster to adjust alignment of the seal plate and the process chamber.

27. (New) The processor of claim 26 further comprising a door position sensor attached to the first leg of the mounting plate.

28. (New) The processor of claim 26 further comprising a first lift actuator attached to the first leg of the mounting plate and a second lift actuator attached to the second leg of the mounting plate.

29. (New). The processor of claim 28 wherein the first and second lift actuators each have a piston moveable within a cylinder and magnetically coupled to a piston follower outside of the cylinder, and with the piston follower of the first lift actuator attached to the first leg of the mounting plate, and with the piston follower of the second lift actuator attached to the second leg of the mounting plate.